

CLAIMS:

1. A container closure engageable with a container having an interior for containing a fluid, the container closure adapted to allow mixing of the fluid and a second material, the container closure comprising
 - 5 a. a fluid opening through which fluid can flow, the fluid opening in fluid communication with the interior of the container, the fluid opening associated with sealing means adapted to substantially seal the fluid opening in a first position and allow fluid to flow in a second position,
 - b. a reservoir containing a second material,
 - 10 c. a first dispenser member associated with the reservoir and having at least one dispenser opening therein, and
 - d. a second dispenser member respectively formed in relation to the first dispenser member, the second dispenser member movable between a closed position
- 15 wherein the at least one dispenser opening in the first dispenser member is substantially obstructed so that no second material can flow, and at least one open position wherein the at least one dispenser opening in the first dispenser member is at least partially unobstructed so that the second material can flow and mix in a passage, prior to exiting the container closure with the fluid flowing through the fluid opening.
- 20 2. The container closure according to claim 1 wherein the fluid in the container can access the fluid opening without mixing with the second material.
3. The container closure according to either claim 1 or 2 wherein the sealing means comprises a plurality of overlapping flexible flaps or petals.
4. The container closure according to claim 3 wherein the petals overlap each other such that in the first closed position, no fluid from the container can pass
25 through the fluid opening.
5. The container closure according to claim 3 or 4 wherein the petals are biased into the closed position, and applying a positive pressure to the container by squeezing or inverting the container, forces the petals into the open position and removing that
30 pressure allows them to close again.
6. The container closure according to any one of claims 3 to 5 wherein the sealing means includes two action portions, the first action portion positioned above the petals and the second action portion positioned below the petals, both action

portions having an opening therein, the openings being coaxial, wherein as the sealing means is raised and lowered, the first and second action portions act to open and close the petals and maintain the petals in the open or closed position as desired by the user.

7. The container closure according to any one of the preceding claims wherein
5 the fluid opening is located at one end of an elongate mouthpiece adapted to allow fluid to flow when the mouthpiece is in the raised position and prevent fluid from flowing when the mouthpiece is depressed.

8. The container closure according to claim 7 wherein the mouthpiece is operable
10 between the raised position and the depressed position independently of the operation and the movement of the dispensing portions.

9. The container closure according to any one of the preceding claims wherein the first dispenser member is a substantially cylindrical body member having at least one dispenser opening located in a sidewall thereof.

10. The container closure according to claim 9 wherein the first dispenser member
15 has an inner sidewall and an outer sidewall linked at a lower end thereof, both the inner and outer sidewall having dispenser openings therein, and the sealing means is provided with at least one extension portion adapted to extend between the inner sidewall and the outer sidewall of the first dispenser member, such that when the sealing means is in the first position, the extension portion is positioned between the
20 inner sidewall and the outer sidewall of the first dispenser member thereby obstructing or closing the openings therein and preventing the second material from flowing and when the sealing means is in the second position, the extension portion is removed from between the inner sidewall and the outer sidewall of the first dispenser member, thereby allowing the second material to flow.

11. The container closure according to either claim 9 or 10 wherein the dispenser
25 openings are arrayed in a spiral or helical pattern on the inner and/or outer wall.

12. The container closure according to any one of the preceding claims wherein the second dispenser member is located concentrically and coaxially with the first dispenser member.

13. The container closure according to claim 12 wherein the second dispenser
30 member includes a wall with an inside surface and an outside surface, the inside surface of the second dispenser member respectively formed in relation to the first dispenser member to form a sealing wall to seal the dispenser openings of the first

dispenser member.

14. The container closure according to either claim 12 or 13 wherein the second dispenser member comprises a ring portion with a substantially S-shaped cross section, part of the ring portion formed as a sealing wall to seal against the first dispenser member and a bulbous portion, the bulbous portion adapted to seal the reservoir from the first dispenser member when the second dispenser member is in the closed position.

15. The container closure according to any one of the preceding claims wherein a plurality of open positions of the second dispenser member and adjusting between the plurality of open positions allows more or less of the second material to flow.

16. The container closure according to claim 15 wherein at least three open positions are provided, the first open position allowing a small amount of second material to mix with the fluid, the second open position allowing proportionally more second material to mix with the fluid, and the third open position allowing the second material to mix with the fluid restrained only by the size of the dispenser openings in the first dispenser member.

17. The container closure according to any one of the preceding claim wherein the first dispenser member and the second dispenser member are rotatably movable with respect to each other between the at least one open and the closed position.

18. The container closure according to claim 17 wherein the first dispenser member and the second dispenser member are threadably associated with each other.

19. The container closure according to any one of the preceding claims wherein the sealing means and the first and second dispenser members are operable independently of one another to allow a user to access the first fluid without accessing the second material or a mixture of the two.